

Please amend the above-identified application as follows:

**Remarks/Arguments** begin on page 2 of this paper.

## **REMARKS/ARGUMENTS**

### Rejection of Claims 1-2 and 5-6 Under 35 U.S.C. § 102(e)

Claims 1-2 and 5-6 are rejected under 35 U.S.C. § 102(e) as being anticipated by Kim et al. (US 6,399,476 B2). In the rejected claims, Claim 1 is independent.

Applicants respectfully traverse with Examiner's rejection on the basis that Kim et al. do not disclose every element of the claimed invention. According to MPEP § 2131, to anticipate a claim, the reference must teach every element of the claim. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. The elements disclosed in Kim et al. fail to show the steps of forming a metal layer over a substrate, forming a pad oxide layer over the metal layer, and patterning and etching the pad oxide layer and metal layer sequentially to form interconnect lines over the substrate.

Particularly, it seems that Kim et al. disclose a structure related to the structure formed by the process of the claimed invention, but structures of Kim et al. and the claimed invention are different. One with ordinary skill in the art can tell the differences between the structure shown in FIG. 4 of Kim et al. and the structure shown in FIG. 4 of the claimed invention, and these differences result from the different

steps. For example, the pad oxide layer 7 is only on the top of the metal layer 6 of the claimed invention while the thin first layer 108 of Kim et al. which is disclosed as a pad oxide layer by Examiner not only completely covers the conductors 106, but also covers the insulating layer 104 or the substrate 100. The difference between the claimed invention and Kim et al. directly results from the sequence of the process steps. That is, the feature of the pad oxide layer 7 only on the top of the metal layer 6 of the claimed invention comes from the sequentially formed metal layer and pad oxide layer on the substrate being patterned and etched together. This feature needs not being recited in the claims since it is the direct result of performing the method of the claimed invention. Contrary to the claimed invention, the features of the thin first layer 108 of Kim et al. which is suggested as a pad oxide layer by Examiner completely covering the conductors 106 and the insulating layer 104 or the substrate 100 which are suggested as the metal layer and the substrate are the direct results induced from the etching of the conductors 106 before the thin first layer 108 is formed over the conductors 106 and the insulating layer 104 or the substrate 100 to completely cover the same. According to MPEP § 2131, “The identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. *In re Bond*, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

It is therefore respectfully submitted that the teaching of Kim does not disclose each and every element of the claimed invention.

Rejection of Claims 3, 4, 7 and 8 Under 35 U.S.C. § 103(a)

Claims 3 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim et al.

Applicants respectfully traverse with Examiner's rejection since Kim et al. do not teach each and every element of the claimed invention according to at least the above-mentioned reasons. According to MPEP § 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). It is therefore submitted that Claims 3 and 8 are patentable over Kim et al.

Claims 4 and 7 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Kim et al. in view of Lin (U.S. 6,211,057 B1).

Applicants respectfully traverse with Examiner's rejection since the teaching of Lin does not disclose the element which Kim fails to disclose. That is, the combination of Kim and Lin fails to teach every element of the claimed invention. Particularly, Lin actually fails to teach the steps of forming a metal layer over a substrate, forming a pad oxide layer over the metal layer, and patterning and etching the pad oxide layer and metal layer sequentially to form interconnect lines over the substrate. Therefore, the combination of Kim and Lin fails to teach every element of the claimed invention. According to MPEP § 2143.03, to establish *prima facie* obviousness of a claimed invention, all the claim limitations

must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). It is therefore that Claims 4 and 7 are patentable over Kim et al.

Conclusion

In light of the above remarks to the claims, Applicants contend that claimed invention is patentable thereover. Pending claims are now in condition for favorable consideration and allowance of Claims are most respectfully requested.

Respectfully submitted,  
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